

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Original) Liquid heating apparatus comprising:
a vessel for holding a liquid to be heated;
a heating system for heating the liquid in the vessel;
a jacket wall outwardly circumscribing said vessel and defining therewith an insulation space between said vessel and said jacket wall, said jacket wall having an opening therein; and
an insulation dam structure including a hollow body portion having opposite open outer and inner sides spaced apart along an axis circumscribed by said body portion, a first sealing portion laterally projecting outwardly from said open outer side, a second sealing portion on said open inner side of said body portion, and a force exerting portion disposed axially inwardly of said first sealing portion,
said insulation dam structure axially extending through said jacket wall opening with said first sealing portion overlying an outer side portion of said jacket wall extending peripherally around said jacket wall opening, said second sealing portion overlying an outer surface portion of said vessel, and said force exerting portion holding said first sealing portion in an axially outwardly deformed sealing engagement with said outer side portion of said jacket wall.

2. (Original) The liquid heating apparatus of Claim 1 wherein said liquid heating apparatus is a water heater, said vessel is a water storage tank adapted to hold a quantity of water.

3. (Original) The liquid heating apparatus of Claim 2 wherein said water heater is an electric water heater.

4. (Original) The liquid heating apparatus of Claim 1 further comprising a structure projecting outwardly from said vessel and shieldingly received within said insulation dam structure.

5. (Original) The liquid heating apparatus of Claim 4 wherein said structure projecting outwardly from said vessel includes an electrical component.

6. (Original) The liquid heating apparatus of Claim 1 wherein said force exerting portion includes a spaced plurality of exterior projections disposed on said body portion inwardly adjacent said first sealing portion.

7. (Original) The liquid heating apparatus of Claim 6 wherein said exterior projections are generally triangularly shaped.

8. (Original) The liquid heating apparatus of Claim 6 wherein said exterior projections are formed integrally with said body portion.

9. (Original) The liquid heating apparatus of Claim 8 wherein said body portion is a plastic molding.

10. (Original) The liquid heating apparatus of Claim 6 wherein said body portion has wall openings formed therein, and said force exerting portion includes tab structures projecting outwardly through said openings.

11. (Original) The liquid heating apparatus of Claim 10 wherein said tab structures are snap-fitted into said openings.

12. (Original) The liquid heating apparatus of Claim 10 wherein said tab structures are carried on locking/force exerting structures snap-fitted to said body portion.

13. (Original) The liquid heating apparatus of Claim 1 wherein said body portion is snap-fitted into said opening in said jacket wall.

14. (Original) The liquid heating apparatus of Claim 1 wherein said body portion is of a one piece molded plastic construction.

15. (Original) The liquid heating apparatus of Claim 1 further comprising bracing structure disposed on an interior portion of said body portion.

16. (Original) The liquid heating apparatus of Claim 15 wherein said bracing structure includes an inwardly projecting flange extending around the periphery of said open inner side of said body portion.

17. (Original) The liquid heating apparatus of Claim 15 wherein said bracing structure includes a spaced plurality of axially elongated ribs.

18. (Original) The liquid heating apparatus of Claim 17 wherein said ribs include a facing pair of ribs disposed on opposite interior sides of said body portion.

19. (Original) The liquid heating apparatus of Claim 18 further comprising a handle structure having outer end portions secured to axially outer end portions of said facing pair of ribs.

20. (Original) The liquid heating apparatus of Claim 1 wherein said second sealing portion is a compressible sealing strip extending around the periphery of said open inner side of said body portion, and said force exerting portion further forces said second sealing portion into sealing engagement with said outer surface portion of said vessel.

21. (Original) The liquid heating apparatus of Claim 20 wherein said compressible sealing strip has indentations formed therein for sealingly receiving electrical wires.

22. (Original) The liquid heating apparatus of Claim 1 wherein said first sealing portion is a resiliently deflectable peripheral lip laterally sloped outwardly and toward said open inner side of said body portion.

23. (Original) The liquid heating apparatus of Claim 22 wherein said lip has a rectangular shape with first and second pairs of opposing side portions, the slopes of one of said pairs of opposing side portions being greater than the slopes of the other pair of opposing side portions.

24. (Original) The liquid heating apparatus of Claim 1 wherein said body portion has a generally rectangular shape.

25. (Original) The liquid heating apparatus of Claim 1 wherein said open inner side has a concave curvature.

26. (Original) The liquid heating apparatus of Claim 1 wherein said hollow body portion has separate axially outer and inner sections which are in a snap-fitted engagement with one another.

27. (Original) The liquid heating apparatus of Claim 26 wherein said first sealing portion is carried by said axially outer section.

28. (Original) The liquid heating apparatus of Claim 27 wherein said force exerting portion includes an interior portion of said inner section interlocked with a corresponding portion of said outer section.

29. (Original) The liquid heating apparatus of Claim 27 wherein said force exerting portion includes an exterior portion of said inner section forcibly engaging an inner side portion of said jacket wall.

30. (Original) The liquid heating apparatus of Claim 26 wherein said outer section has axially extending resilient tabs snap-fittingly received in corresponding locking openings in said inner section.

31. (Original) The liquid heating apparatus of Claim 26 wherein said inner section has an axially outer peripheral portion complementarily received in said jacket wall opening.

32. (Original) The liquid heating apparatus of Claim 26 further comprising bracing structure disposed on an interior portion of said inner section.

33. (Original) The liquid heating apparatus of Claim 32 wherein said bracing structure includes an inwardly projecting flange extending around the periphery of the open inner side of said inner section.

34. (Original) The liquid heating apparatus of Claim 33 wherein said bracing structure further includes a reinforcing rib portion laterally projecting axially from said flange.

35. (Original) The liquid heating apparatus of Claim 32 wherein said bracing structure includes a spaced plurality of axially elongated ribs.

36. (Original) The liquid heating apparatus of Claim 35 wherein axially outer end portions of adjacent pairs of said ribs are joined to form locking recesses, and said outer section of said hollow body portion has axially inwardly projecting tab structures snap-fittingly received in said locking recesses.

37. (Original) The liquid heating apparatus of Claim 35 wherein said ribs include a facing pair of first and second ribs disposed on opposite side wall portions of said inner section, and said inner section further includes an elongated handle structure longitudinally extending between and intersecuring axially outer end portions of said first and second ribs.

38. (Original) The liquid heating apparatus of Claim 37 wherein said outer section has an elongated cross member extending across its open outer side, said cross member being interlocked with said handle structure.

39. (Original) The liquid heating apparatus of Claim 38 wherein said handle structure has an axially outer side rib received in an axially inner side recess formed on said cross member.

40-76. (Canceled)